CEM SYSTEMS

EIOC
Ethernet Input Output Controller

OVERVIEW

The Ethernet Input Output Controller (EIOC) is an addition to the Ethernet suite of devices for use on the AC2000 system. Connecting to the nearest network point the EIOC provides a flexible means to monitor and control an array of equipment.

The EIOC features 16 analogue inputs and 8 digital outputs. The 16 analogue inputs can be cross-mapped to one or many of the outputs upon activation / deactivation. The 8 digital outputs are a combination of 4 NO/NC relay contacts and 4 open collector switches that can all be controlled by the EIOC. The outputs can be used to control solid-state relays, which in turn can control all kinds of equipment including Intruder panels, PIR detectors, or switching on/off heating and lighting.

Additionally inputs on the EIOC can be used to activate a Broadcast Zone on the AC2000 system which can be configured to activate an output on a different EIOC or CEM reader located anywhere on the network.

EIOC

FEATURES

- Ethernet connectivity to host

- 16 Inputs (2 or 4 state)

- 8 Outputs (4 Relay NO/NC and 4 Open Collector)

- Outputs can be mapped to single or multiple inputs on the same controller or across the network

- Dedicated tamper input

- Designed for ease of installation and maintenance using 2 part connectors throughout

- Backup battery connection for emergency power (optional)

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Alarms

The EIOC will send the normal input state change alarms. In addition to this unit tamper, mains failure and mains restored alarms will also be sent to host controller.

Offline operation

When offline the EIOC will operate as normal using the last configuration it received. If there has been no configuration received it will operate using the default configuration. The EIOC does not store any offline alarms.

Input to Output mapping

It is possible to have more than one input controlling the same output. In this scenario the EIOC works by logically ORing the activation and deactivation of the input. Simply put, any input transitioning to an active state will activate the associated output but all associated inputs must be deactivated for the output to deactivate.

Other methods that can be used to deactivate an output are:

- Output time can be used to clear an output. The last input going active will set the time for the output to remain active.
- When a configured cancelling input activates the associated output will deactivate.
- A broadcast can be sent to activate or deactivate a specific output.

Broadcasts

Any combination of outputs can be broadcast active or inactive at any time when the EIOC is online. When an output has been broadcast active a state change of any related input will have no effect on the output state as a broadcast will be given priority. Broadcasting the output inactive will revert back to the last configured input mapping condition. During the period when an output is broadcast active the mapped inputs can still be configured to send input alarms to the system.

TECHNICAL SPECIFICATIONS

PHYSICAL

Size
  - Board Only   228x138x40mm (9 x 5.4 x 1.6")
  - Enclosure   330x275x80mm (13 x 10.8 x 3.2")
Weight
  - Board Only   0.3Kg
  - Enclosure   5.65Kg
Power
  - Board Only:
  - Voltage   18Vac or 12Vdc
  - Current Consumption 250mA (excluding locks)
  - Enclosure:
  - Voltage   230Vac + 10%, -15%, 50 Hz.
  - Current Consumption 450mA (excluding locks)
  - Backup Battery   Integral charging circuit provided. (Battery not supplied).
Environmental
  - Temperature   -10o to 50oC (14o to 122oF)
  - Humidity   95% non condensing

LED Indicators   Power, Heartbeat, Link Status, Activity and Output Status.

FUNCTIONALITY

Inputs   16 General Purpose*
                       Dedicated Tamper Input
                       Battery Low (reported internally)
                       Dedicated Power Fail Input
                       * = 4 state tamper protected inputs

Outputs   8 Outputs
                         4 relay outputs 24@1.5A
                         4 FET outputs 12/24V open collector
                         outputs limited to 1.5A

Memory   256kB Flash memory
                       4MB RAM

COMMUNICATION INTERFACE

To System Host   10/100 Base-T TCP/IP using CAT5
                       Unshielded twisted pair cable

  - Connection   RJ45

PRODUCT CODES

IOC/010/000   EIOC (Complete with PSU Enclosure)

Product specifications and availability is subject to change without notice. Certain product names mentioned herein may be trade names and/or registered trademarks of their companies.